AMENDMENTS TO THE CLAIMS

1.—53. (Canceled)

54. (New) A method for reporting simulation results of a model, said method comprising:

receiving by a report generator a selection of a template to generate a report reporting simulation results of a model, the template including a plurality of components;

processing by the report generator the plurality of components;

issuing by the report generator a plurality of commands to a technical computing environment using a programming language provided by the technical computing environment, wherein one of the plurality of commands instructs the technical computing environment to simulate the model;

receiving data from the technical computing environment in response to the plurality of commands; and

generating the report incorporating the received data.

55. (New) The method of claim 54 further comprising:

issuing by the report generator a command to change a parameter or an initial condition of the model simulation.

56. (New) The method of claim 54 further comprising:

issuing by the report generator a command to increment the model simulation by one or more time steps.

57. (New) The method of claim 54 further comprising:

issuing by the report generator a command to modify the model by adding or removing a function block.

58. (New) The method of claim 54 further comprising:

controlling by the report generator the simulation of the model; and

generating the report on a state of the simulation at a specified time step.

59. (New) The method of claim 54, wherein the model is simulated by a simulator that interacts with the technical computing environment.

60. (New) The method of claim 54 further comprising:

creating the template using the plurality of components.

61. (New) The method of claim 54 further comprising:

generating an intermediate representation of the report.

62. (New) The method of claim 54 further comprising:

executing an external process to change a state of a calculation workspace of the technical computing environment.

63. (New) The method of claim 54, wherein the template is recursively defined.

64. (New) The method of claim 54 further comprising:

evaluating, by the report generator, expressions in a calculation workspace of the technical computing environment, wherein the expressions are defined using the programming language of the technical computing environment.

65. (New) The method of claim 54, wherein a subset of the components define a reporting programming language having flow control constructs.

66. (New) The method of claim 54, wherein the components are defined using an object orientated programming language.

67. (New) A system for reporting simulation results of a model, said system comprising:

a simulator for simulating a model;

a technical computing environment that interacts with the simulator, the technical computing environment includes a calculation workspace that stores definitions and data of the model; and

a report generator that controls the simulation of the model and issues a plurality of commands to the technical computing environment using a programming language of the technical computing environment, wherein the report generator includes a generation engine that generates a report including data provided by the technical computing environment in response to the plurality of commands.

68. (New) A medium storing computer executable instructions for reporting simulation results of a model, the instructions include the instructions for:

receiving by a report generator a selection of a template to generate a report reporting simulation results of a model, the template including a plurality of components;

processing by the report generator the plurality of components;

issuing by the report generator a plurality of commands to a technical computing environment using a programming language provided by the technical computing environment, wherein one of the plurality of commands instructs the technical computing environment to simulate the model;

receiving data from the technical computing environment in response to the plurality of commands; and

generating the report incorporating the received data.